

Serial No. 09/469,791

Docket No.: 113335F

CLAIMS

1-24. Canceled.

1 25. (Currently Amended) A method comprising
2 reserving, for a particular call, packet network resources of a first packet network
3 according to its own reservation policy; and
4 reserving, for the call, packet network resources of a second packet network
5 according to its own reservation policy,
6 the second packet network being coupled to the first packet network and the
7 reservation policy for the first packet network differing from the reservation policy for the
8 second packet network,
9 the reserving packet network resources of the first packet network being based on an
10 indication from a calling party;
11 the reserving packet network resources of the second packet network being based on
12 an indication from a called party,
13 the first packet network and the second packet network being coupled to each other
14 through a third packet network,
15 the indication from the calling party being a message indicating a limit for packet
16 network resources of the first packet network to be reserved and for packet network resources
17 of the third packet network to be reserved, the indication from the calling party being
18 communicated to the third packet network via a first network edge device, and
19 the indication from the called party being a message indicating a limit for packet
20 network resources of the second packet network to be reserved and for packet network
21 resources of the third packet network to be reserved, the indication from the called party
22 being communicated to the third packet network via a second network edge device without
23 being communicated via the first network edge device and the indication from the called
24 party being communicated independently of the indication communicated by the calling
25 party.

26. (Previously Presented) The method of claim 25 wherein

Serial No. 09/469,791

Docket No.: 113335F

the first packet network is a first access packet network associated with a calling party and connected to a backbone packet network, and

the second packet network is a second access packet network associated with a called party and connected to the backbone packet network.

- 1 27. (Previously Presented) The method of claim 26 wherein said first and second
2 access packet networks are television coaxial cable networks and wherein said backbone
3 packet network is packet telephony service.

28. Canceled.

29. Canceled.

- 1 30. (Currently Amended) The method of claim 25, wherein
2 the indication from the calling party is a first message sent to an originating gate
3 controller that acts upon that message to reserve a portion of the resources of the third
4 network for the call; and
5 the indication from the called party is a second message sent to a terminating gate
6 controller that acts upon that message to reserve another portion of the resources of the third
7 network for the call, the second message being different from the first message and not being
8 sent from the calling party.

31. Canceled.

- 1 32. (Currently Amended) A method comprising
2 reserving, for a call, packet network resources of an access packet network according
3 to its own reservation policy; and
4 reserving, for the call, packet network resources of a backbone packet network
5 according to its own reservation policy,
6 the backbone packet network being coupled to the access packet network and the
7 reservation policy for the backbone packet network differing from the reservation policy for
8 the access packet network,

Serial No. 09/469,791

Docket No.: 113335F

9 the reservation policy for the access packet network including a policy that capacity
10 in the access packet network for transmit and receive directions of communication is
11 reserved upon the access packet network receiving a particular message, at the same time,
12 and

13 the reservation policy for the backbone packet network including a policy that
14 capacity in the backbone packet network for transmit and receive directions of
15 communication is reserved at different times,

16 said reserving of backbone packet network resources for the transmit direction being
17 carried out in response to the backbone network receiving a first request to reserve said
18 transmit direction capacity, and

19 said reserving of backbone packet network resources for the receive direction being
20 carried out in response to the backbone network receiving a second request to reserve said
21 receive direction capacity, said first and second requests being received by said backbone
22 network in first and second separate messages received from respective different network
23 entities.

1 33. (Previously Presented) The method of claim 32 wherein said access packet
2 network is a television coaxial cable network and wherein said backbone packet network is
3 adapted to provide packet telephony service.

1 34. (Previously Presented) The method of claim 32 wherein
2 the reservation policy for the access packet network further includes a policy that
3 packet network resources of the access packet network are reserved on a per-call basis, and
4 the reservation policy for the backbone packet network further includes a policy that
5 packet network resources of the backbone packet network are reserved on a multiple-call
6 basis.

35. Canceled.

36. Canceled.

37. Canceled.

Serial No. 09/469,791

Docket No.: 113335F

1 38. (Previously Presented) A method comprising
2 receiving, from a calling party over a first access packet network, a reserve message
3 for a two-directional call;
4 reserving, for the call, in response to the reserve message, packet network resources
5 of the first access packet network for both directions of the call; and
6 reserving for the call, in response to the reserve message, packet network resources of
7 a backbone packet network for only one direction of the call,
8 the backbone packet network being coupled to the access packet network.

1 39. (Previously Presented) The method of claim 38 wherein said reserving
2 of packet network resources of the backbone packet network includes
3 sending, in response to said received reserve message, a backbone reserve message
4 into said backbone packet network in order to reserve said packet network resources of said
5 backbone packet network.

1 40. (Previously Presented) The method of claim 39 wherein said access packet
2 network is a television coaxial cable network and wherein said backbone packet network is
3 adapted to provide packet telephony service.

41. Canceled.

1 42. (Previously Presented) The method of claim 39 further comprising
2 receiving, from a called party over a second access packet network, a second reserve
3 message for the call;
4 reserving, for the call, in response to the second reserve message, packet network
5 resources of the second access packet network for both directions of the call; and
6 reserving, in response to the second reserve message, packet network resources of the
7 backbone packet network for the second direction of the call,
8 the backbone packet network being coupled to the second access packet network.

1 43. (Previously Presented) The method of claim 42 wherein said first and second
2 access packet networks are television coaxial cable networks and wherein said backbone
3 packet network is adapted to provide packet telephony service.

Serial No. 09/469,791

Docket No.: 113335F

1 44. (Currently Amended) A method comprising
2 receiving a reserve message requesting the reservation of at least one packet network
3 resource for a particular two-directional call;
4 responsive to the reserve message, reserving for the call packet network resources of
5 a first packet network according to its own reservation policy; and
6 responsive to the reserve message, sending a backbone reserve message to the
7 backbone packet network based on a selected one of a plurality of backbone reservation
8 policies of the backbone packet network, so that packet network resources of the backbone
9 packet network are reserved based on the selected reservation policy,
10 wherein the reservation policy for the first packet network includes reserving, in
11 response to the reserve message, ~~a capacity resources~~ in the first packet network for both
12 directions of the call, and
13 wherein the selected reservation policy for the backbone packet network includes
14 reserving, in response to the reserve message, ~~a capacity resources~~ in the backbone packet
15 network for only one direction of the call.

1 45. (Previously Presented) The method of claim 44 wherein said first packet
2 network is a television coaxial cable network and wherein said backbone packet network is
3 adapted to provide packet telephony service.

46. Canceled.

47. Canceled.

1 48. (Previously Presented) The method of claim 44 wherein
2 the plurality of reservation policies associated with the backbone packet network
3 includes a reservation policy that reserves packet network resources of the backbone packet
4 network on a per-call basis, and wherein said backbone reserve message is further based on
5 that reservation policy.

Serial No. 09/469,791

Docket No.: 113335F

1 49. (Previously Presented) The method of claim 44 wherein
2 the plurality of reservation policies of the backbone packet network includes a
3 reservation policy that reserves packet network resources of the backbone packet network on
4 a multiple-call basis, and wherein said backbone reserve message is further based on that
5 reservation policy.

50. Canceled.

1 51. (Previously Presented) The method of claim 44 wherein said method is
2 performed by an originating network edge device connected to both the first packet network
3 and the backbone packet network.

1 52. (Previously Presented) The method of claim 51 wherein the first packet
2 network is an access packet network associated with a calling party.

1 53. (Previously Presented) The method of claim 44 wherein said method is
2 performed by a terminating network edge device connected to both the first packet network
3 and the backbone packet network.

1 54. (Previously Presented) The method of claim 53 wherein the first packet
2 network is an access packet network associated with a called party.

1 55. (Previously Presented) A method performed by a packet network device for
2 reserving packet network resources for a call to be placed over a path that includes at least
3 first and second packet networks that have different packet network resource reservation
4 policies, said packet network device being coupled to both of said first and second networks,
5 the method comprising
6 receiving a resource reservation message over the first network, and
7 responsive to the received message, reserving resources in both of said first and
8 second networks in accordance with their respective resource reservation policies,
9 wherein the resource reservation policy for each network comprises a set of rules that
10 defines how resources for that network are reserved.

Serial No. 09/469,791

Docket No.: 113335F

1 56. (Previously Presented) The method of claim 55 wherein said first packet
2 network is a television coaxial cable network and wherein said second packet network is
3 adapted to provide packet telephony service.

1 57. (Previously Presented) The method of claim 55 wherein at least one of said
2 first and second networks has a plurality of resource reservation policies and wherein said
3 reserving includes reserving resources based on a selected one of the plurality of resource
4 reservation policies.

1 58. (Previously Presented) The method of claim 55 wherein the packet network
2 device is a network edge device, and the first packet network is a first access network that
3 couples subscriber equipment to the network edge device.

1 59. (Previously Presented) The method of claim 58 wherein the second packet
2 network is a backbone network coupled to a second access network.

1 60. (Previously Presented) The method of claim 55 wherein the packet network
2 device is one of: a router and a bridge.

1 61. (Previously Presented) The method of claim 55 wherein said reserving
2 resources in both of said first and second networks reserves for the call a constant-bit-rate
3 channel in the first network and reserves for the call other than a constant-bit-rate channel in
4 the second network.

1 62. (Previously Presented) The method of claim 61 wherein said first packet
2 network is a television coaxial cable network and wherein said second packet network is
3 adapted to provide packet telephony service.

63. Canceled.

64. Canceled.

Serial No. 09/469,791

Docket No.: 113335F

1 65. (Previously Presented) The method of claim 55 wherein the resource
2 reservation policy for each network has characteristics that define a type of reservation made
3 for network resources.

1 66. (Previously Presented) The method of claim 65 wherein said characteristics
2 indicate a uni-directional or a bi-directional reservation capacity.

1 67. (Previously Presented) The method of claim 55 wherein the resource
2 reservation message is received from subscriber equipment.

1 68. (Previously Presented) A method performed by a network edge device for
2 reserving packet network resources for a call to be placed over a path that includes an access
3 packet network and a backbone packet network, said access packet network and said
4 backbone packet network having different packet network resource reservation policies, said
5 network edge device coupling said access network to said backbone network, the method
6 comprising
7 receiving a resource reservation message from subscriber equipment over the access
8 network, the resource reservation message specifying an amount of bandwidth desired for the
9 call, and
10 responsive to the received message, reserving resources for the specified amount of
11 bandwidth in both said access network and said backbone network in accordance with those
12 networks' respective resource reservation policies,
13 the resource reservation policy for each said network being a set of rules that define
14 how resources are reserved for that network.

1 69. (Previously Presented) The method of claim 68 wherein said access packet
2 network is a television coaxial cable network and wherein said backbone packet network is
3 adapted to provide packet telephony service.

1 70. (Previously Presented) The method of claim 68 wherein at least one of the
2 access network and the backbone network has a plurality of resource reservation policies and
3 wherein said reserving includes reserving resources for the call based on a selected one of the
4 plurality of resource reservation policies.

Serial No. 09/469,791

Docket No.: 113335F

1 71. (Previously Presented) The method of claim 70 wherein the network edge
2 device is one of: a router and a bridge.

1 72. (Previously Presented) The method of claim 71 wherein said reserving
2 reserves a constant-bit-rate resource in the access network and other than a constant-bit-rate
3 resource in the backbone network.

1 73. (Previously Presented) The method of claim 72 wherein said access network
2 is a television coaxial cable network and wherein said backbone packet network is adapted to
3 provide packet telephony service.

1 74. (Previously Presented) A packet network device for reserving packet network
2 resources for a call to be placed over a path that includes at least first and second packet
3 networks that have different packet network resource reservation policies, said packet
4 network device being adapted to be coupled to both of said first and second networks, the
5 packet network device being further adapted to
6 receive a resource reservation message over the first network, and
7 responsive to the received message, reserve resources in both of said first and second
8 networks in accordance with their respective resource reservation policies,
9 the resource reservation policy for each said network being a set of rules that define
10 how resources are reserved for that network.

1 75. (Previously Presented) The invention of claim 74 wherein said packet
2 network device is further adapted to select for the call a particular one of a plurality of
3 resource reservation policies of a particular one of said networks, resources in said particular
4 network being reserved based on the selected resource reservation policy.

1 76. (Previously Presented) The invention of claim 74 wherein the packet network
2 device is one of: a router and a bridge.

1 77. (Currently Amended) The invention of claim 55 wherein

Serial No. 09/469,791

Docket No.: 113335F

2 the resource reservation policy for the first packet network includes a policy that
3 capacity for a transmit direction of communication in the first packet network is reserved at
4 the same time as capacity for a receive direction of communication in the first packet
5 network, and

6 the resource reservation policy for the second packet network includes a policy that
7 capacity for a transmit direction of communication in the second packet network is reserved
8 at a different time from reservation capacity for a receive direction of communication in the
9 second packet network.

1 78. (Previously Presented) The method of claim 77 wherein
2 the resource reservation policy for the first network further includes a policy that
3 packet network resources of the first packet network are reserved on a per-call basis, and
4 the resource reservation policy for the second network further includes a policy that
5 packet network resources of the second packet network are reserved on a multiple-call basis.

1 79. (Currently Amended) The invention of claim 68 wherein
2 the resource reservation policy for the access network further includes a policy that
3 resources for a transmit direction of communication in the access packet network is reserved
4 at the same time as resources for a receive direction of communication in the access packet
5 network, and
6 the resource reservation policy for the backbone packet network includes a policy that
7 resources for a transmit direction of communication in the backbone packet network is
8 reserved at a different time from reservation resources for a receive direction of
9 communication in the backbone packet network.

1 80. (Previously Presented) The method of claim 79 wherein
2 the reservation policy for the access network further includes a policy that packet
3 network resources of the access packet network are reserved on a per-call basis, and
4 the reservation policy for the backbone network further includes a policy that packet
5 network resources of the backbone packet network are reserved on a multiple-call basis.